## **AMENDMENTS TO THE CLAIMS**

1. (Currently Amended) A method of treatment of diseases that involve IL-8 induced human

PMN chemotaxisUse \_comprising administering of \_2-arylacetic acid compounds and derivativesa compound of formula (I):

$$\begin{array}{c|c}
 & \text{Hy} \\
 & \text{X} \\
 & \text{Y} \\
 & \text{R}
\end{array}$$

$$\begin{array}{c|c}
 & \text{Y} \\
 & \text{R}
\end{array}$$

$$\begin{array}{c|c}
 & \text{Y} \\
 & \text{R}
\end{array}$$

and pharmaceutically acceptable salts thereofor a pharmaceutically acceptable salt thereof, wherein

A <u>is selected from benzene</u>, naphthalene, pyridine, pyrimidine, pyrrole, imidazole, furane, thiophene, indole and 7-aza-indole includes the X atom and represents a 5-6 membered aromatic or heteroaromatic ring optionally including a heteroatom, or a further heteroatom when X is N, selected from N (nitrogen), O (oxygen), S (sulfur); the 5-6 membered aromatic or heteroaromatic ring is optionally fused with a second ring to give bicyclic aromatic or heteroaromatic structures;

labels 1 and 2 mark the relevant positions on the A ring;

the X atom is selected from N (nitrogen) and C (carbon);

R is a substituting group on the A ring selected from:

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- a group in the 3 (meta) position selected from a linear or branched C<sub>1</sub>-C<sub>5</sub> alkyl, C<sub>2</sub>-C<sub>2</sub>-C<sub>5</sub>-alkenyl or C<sub>2</sub>-C<sub>5</sub>-alkynyl group, substituted or not-substituted phenyl, linear or branched C<sub>1</sub>-C<sub>5</sub> hydroxyalkyl, C<sub>2</sub>-C<sub>5</sub>-acyl, substituted or not-substituted benzoyl;

a group in the 4 (para) position selected from C<sub>1</sub>-C<sub>5</sub> alkyl, C<sub>2</sub>-C<sub>5</sub>-alkenyl or C<sub>2</sub>-C<sub>5</sub>-alkynyl group, C<sub>3</sub>-C<sub>6</sub>-cycloalkyl, C<sub>1</sub>-C<sub>5</sub>-acyloxy, substituted or not-substituted benzoylamino, C<sub>1</sub>-C<sub>5</sub>-acyloxy, C<sub>1</sub>-C<sub>5</sub>-acylamino, substituted or not-substituted benzoylamino, C<sub>1</sub>-C<sub>5</sub>-sulfonyloxy, substituted or not-substituted benzenesulfonyloxy, C<sub>1</sub>-C<sub>5</sub>-alkanesulfonylamino, substituted or not-substituted benzenesulfonylamino, C<sub>1</sub>-C<sub>5</sub>-alkanesulfonylmethyl, substituted or not-substituted benzenesulfonylmethyl, 2-furyl; 3-tetrahydrofuryl; 2 thiophenyl; 2-tetrahydrothiophenyl groups or a C<sub>1</sub>-C<sub>8</sub>-alkanoyl, cycloalkanoyl or arylalkanoyl-C<sub>1</sub>-C<sub>5</sub>-alkylamino group;

Hy is a small hydrophobic group with a steric hindrance factor  $\nu$  ranging between 0.5 and 0.9 Å (where  $\nu$  is the Charton steric constant for substituents), including methyl, ethyl, ehlorine, bromine, methoxy, trifluoromethyl;

the Y group is selected from O (oxygen) and NH;

when Y is O (oxygen), R' is H (hydrogen);

when Y is NH, R' is selected from

- H,  $C_1$ - $C_5$ -alkyl,  $C_1$ - $C_5$ -cycloalkyl,  $C_1$ - $C_5$ -alkenyl;
- an amino acid residue consisting of straight or branched C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-cycloalkyl, C<sub>1</sub>-C<sub>6</sub>-alkenyl, phenylalkyl substituted with one or more carboxy (COOH) groups;

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- an amino acid residue consisting of straight or branched C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-cycloalkyl, C<sub>1</sub>-C<sub>6</sub>-alkenyl, phenylalkyl, bearing along the chain a heteroatom selected

from oxygen and sulfur and with one or more carboxy (COOH) groups;

- a residue of formula -CH<sub>2</sub>-CH<sub>2</sub>-Z-(CH<sub>2</sub>-CH<sub>2</sub>O)nR" wherein R" is H or C<sub>1</sub>-C<sub>5</sub>-alkyl, n is an integer from 0 to 2 and Z is oxygen or sulfur;
- a residue of formula –(CH<sub>2</sub>)n-NRaRb wherein n is an integer from 0 to 5 and each Ra and Rb, which may be the same or different, are C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkenyl or, alternatively, Ra and Rb, together with the nitrogen atom to which they are bound, form a heterocycle from 3 to 7 members of formula (II)

$$(CH_2)_n$$
 $(II)$ 

- wherein W represents a single bond, CH<sub>2</sub>, O, S or N-Rc, wherein Rc is H, C<sub>1</sub>-C<sub>6</sub>-alkyl or C<sub>1</sub>-C<sub>6</sub>-alkylphenyl;
- a residue OR" wherein R" is H, methyl, carboxymethyl;
- a residue of formula SO<sub>2</sub>Rd wherein Rd is C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-cycloalkyl, C<sub>1</sub>-C<sub>6</sub>-alkenyl; in the preparation of a medicament for the treatment of diseases that involve IL-8 induced human PMNs chemotaxis, such as psoriasis, ulcerative colitis, melanoma, chronic obstructive pulmonary disease (COPD), bullous pemphigoid, rheumatoid arthritis, idiopathic

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fibrosis, glomerulonephritis and in the prevention and treatment of damages caused by ischemia and reperfusion.

## 2. (Cancelled)

- 3. (Currently Amended) Use The method according to claim 1, wherein YR' is OH.
- 4. (Currently Amended) Use-The method according to claim 1, wherein Y is NH and R' is:
  - the amino acid residue of glycine,  $\beta$ -alanine,  $\gamma$ -aminobutyric acid or residues of an L- $\alpha$ -amino acid selected in the group of L-alanine, valine, leucine, isoleucine, nor-leucine, phenylalanine, S-methylcysteine, methionine;
  - a residue of formula –CH<sub>2</sub>-CH<sub>2</sub>-O-(CH<sub>2</sub>-CH<sub>2</sub>O)R'' wherein R'' is H or C<sub>1</sub>-C<sub>5</sub>-alkyl;
  - a residue of formula –(CH2)n-NRaRb wherein n is an integer from 2 to three, more preferably 3, and the group NRaRb is N,N-dimethylamine, N,N-diethylamine, 1-piperidyl, 4-morpholyl, 1-pyrrolidyl, 1-piperazinyl, 1-(4-methyl)piperazinyl;
  - a residue OR' wherein R' is H, methyl;
  - a residue of formula SO<sub>2</sub>Rd wherein Rd is methyl, ethyl or isopropyl.
- 5. (Currently Amended) Use-The method according to any of claims 1, to-3, or 4, wherein R is 3'-benzoyl, 3'-(4-chloro-benzoyl), 3'- (4-methyl-benzoyl), 3'-acetyl, 3'-propionyl, 3'-isobutanoyl, 3'-ethyl, 3'-isopropyl, 4'-isobutyl, 4'-trifluoromethanesulphonyloxy, 4'-benzenesulphonyloxy, 4'-trifluoromethanesulphonylamino, 4'-benzenesulphonylamino, 4'-

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benzenesulphonylmethyl, 4'-acetyloxy, 4'-propionyloxy, 4'-benzoyloxy, 4'acetylamino, 4'propionylamino, 4'-benzoylamino.

- 6. (Currently Amended) Use-The method according to claim 1, wherein Hy is selected from methyl, ethyl, chlorine, bromine, methoxy, and trifluoromethyl.
- 7. (Currently Amended) Use—The method according to claim 1, wherein—2-arylacetic acid compounds and derivatives of formula (I) arethe compound is selected from:
  - (3-benzoyl-2-methylphenyl)acetic acid,
  - (2-chloro-3-propionylphenyl)acetic acid,
  - (3-isopropyl-2-methylphenyl)acetic acid,
  - (4-isobutyl-2-methylphenyl)acetic acid,
  - {2-methyl-4-[(phenylsulphonyl)amino]phenyl}acetic acid,
  - $\{2\text{-methyl-4-[(trifluoromethanesulphonyl)amino]phenyl}\} acetic\ acid,$
  - {2-chloro-4-[(trifluoromethanesulphonyl)oxy]phenyl}acetic acid,
  - (5-acetyl-1-methyl-1H-pyrrol-2-yl)acetic acid,
  - [1-methyl-5-(4-methylbenzoyl)-1H-pyrrol-2-yl]acetic acid,
  - (5-benzoyl-1-methyl-1H-pyrrol-2-yl)acetic acid,
  - [1-methyl-5-(4-chlorobenzoyl)-1H-pyrrol-2-yl]acetic acid,
  - (5-isobutyryl-1-methyl-1H-pyrrol-2-yl)acetic acid,
  - (1-benzoyl-2-methyl-1H-pyrrol-3-yl)acetic acid,
  - (1-benzoyl-2-chloro-1H-pyrrol-3-yl)acetic acid,

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- (1-benzoyl-2-methyl-1H-indol-3-yl)acetic acid,
- [1-(4-chlorobenzoyl)-2-methyl-1H-indol-3-yl]acetic acid,
- (1-isopropyl-2-methyl-1H-pyrrole[2,3-b]pyridin-3-yl)acetic acid,
- (3-benzoyl-2-methoxyphenyl)acetic acid,
- (5-acetyl-1-methyl-1H-pyrrol-2-yl)acetamide,
- (5-acetyl-1-methyl-1H-pyrrol-2-yl)-N-carboxymethylacetamide,
- (S)(5-acetyl-1-methyl-1H-pyrrol-2-yl)-N-(2-carboxyethyl)acetamide,
- (5-acetyl-1-methyl-1H-pyrrol-2-yl)-N-(3-dimethylaminopropyl)acetamide,
- (S)(5-acetyl-1-methyl-1H-pyrrol-2-yl)-N-(3-methoxy-2-carboxypropyl)acetamide,
- (4-isobutyl-2-methylphenyl)acetamide,
- (2-chloro-3-propionylphenyl))-N-(3-dimethylaminoethyl)acetamide,
- (3-isopropyl-2-methylphenyl)-N-[3-(1-piperidinyl)propyl]acetamide,
- (3-benzoyl-2-methylphenyl)acetamide,
- (1-benzoyl-2-methyl-1H-indol-3-yl)acetamide,
- (1-benzoyl-2-methyl-1H-indol-3-yl)-N-(3-dimethylaminopropyl)acetamide,
- [1-(4-chlorobenzoyl)-2-methyl-1H-indol-3-yl]acetamide,
- [1-(4-chlorobenzoyl)-5-methoxy-2-methyl-1H-indol-3-yl]acetamide,
- {2-chloro-4-[(trifluoromethanesulphonyl)oxy]phenyl}-N-(2-hydroxyethoxyethyl)acetamide,
- (1-benzoyl-2-methyl-1H-pyrrol-3-yl)-N-(2-methoxyethyl)acetamide,
- (1-benzoyl-2-chloro-1H-pyrrol-3-yl)-N-[3-(1-morpholino)propyl]acetamide,
- (5-isobutyryl-1-methyl-1H-pyrrol-2-yl)acetamide,
- (5-benzoyl-1-methyl-1H-pyrrol-2-yl)-N-(2-carboxymethyl)acetamide,

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[1-methyl-5-(4-chlorobenzoyl)-1H-pyrrol-2-yl]-N-(2-hydroxyethoxyethyl)acetamide,

[1-methyl-5-(4-chlorobenzoyl)-1H-pyrrol-2-yl]acetamide,

{2-methyl-4-[(phenylsulphonyl)amino]phenyl}-N-(3-dimethylaminopropyl)acetamide, and (3-benzoyl-2-methoxyphenyl)acetamide.

8. (Currently Amended) 2-Arylacetic acid compounds A compound and derivatives of formula

(Ia)

$$\begin{array}{c|c} Hy & H \\ X & \downarrow & H \\ X & \downarrow & N \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & \\ & & & \\$$

and or a pharmaceutically acceptable saltssalt thereof,

wherein:

A is selected from benzene, naphthalene, pyridine, pyrimidine, pyrrole, imidazole, furane, thiophene, indole and 7-aza-indole includes the X atom and represents a 5-6 membered aromatic or heteroaromatic ring optionally including a heteroatom, or a further heteroatom when X is N, selected from N (nitrogen), O (oxygen), S (sulfur); the 5-6 membered aromatic or heteroaromatic ring is optionally fused with a second ring to give bicyclic aromatic or heteroaromatic structures;

labels 1 and 2 mark the relevant positions on the A ring;

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the X atom is selected from N (nitrogen) and C (carbon);

R is a substituting group on the A ring selected from:

a group in the 3 (meta) position selected from a linear or branched C<sub>1</sub>-C<sub>5</sub> alkyl, C<sub>2</sub>-C<sub>5</sub>-alkenyl or C<sub>2</sub>-C<sub>5</sub>-alkynyl group, substituted or not-substituted phenyl, linear or branched C<sub>1</sub>-C<sub>5</sub> hydroxyalkyl, C<sub>2</sub>-C<sub>5</sub>-acyl, substituted or not-substituted benzoyl;

a group in the 4 (para) position selected from C<sub>1</sub>-C<sub>5</sub> alkyl, C<sub>2</sub>-C<sub>5</sub>-alkenyl or C<sub>2</sub>-C<sub>5</sub>-alkynyl group, C<sub>3</sub>-C<sub>6</sub>-cycloalkyl, C<sub>1</sub>-C<sub>5</sub>-acyloxy, substituted or not-substituted benzoyloxy, C<sub>1</sub>-C<sub>5</sub>-acylamino, substituted or not-substituted benzoylamino, C<sub>1</sub>-C<sub>5</sub>-sulfonyloxy, substituted or not-substituted benzenesulfonyloxy, C<sub>1</sub>-C<sub>5</sub>-alkanesulfonylamino, substituted or not-substituted benzenesulfonylamino, C<sub>1</sub>-C<sub>5</sub>-alkanesulfonylmethyl, substituted or not-substituted benzenesulfonylmethyl, 2-furyl; 3-tetrahydrofuryl; 2- thiophenyl; 2-tetrahydrothiophenyl groups or a C<sub>1</sub>-C<sub>8</sub>-alkanoyl, cycloalkanoyl or arylalkanoyl-C<sub>1</sub>-C<sub>5</sub>-alkylamino group;

Hy is a small hydrophobic group with a steric hindrance factor  $\nu$  ranging between 0.5 and 0.9 Å (where  $\nu$  is the Charton steric constant for substituents), including methyl, ethyl, ehlorine, bromine, methoxy, trifluoromethyl;

Rd is  $C_1$ - $C_6$ -alkyl,  $C_1$ - $C_6$ -cycloalkyl,  $C_1$ - $C_6$ -alkenyl.

9. (Currently Amended) Compounds The compound according to claim 8, wherein

A is <u>selected from</u> benzene, pyridine, pyrimidine, pyrrole, imidazole, furane, thiophene, <u>and</u> indole;

Rd is selected from methyl, ethyl orand isopropyl;

Hy is selected from methyl, ethyl, chlorine, bromine, methoxy, and trifluoromethyl.

- 10. (Currently Amended) <u>A compound Compounds according to claims 8 or 9</u>, selected from (5-acetyl-1-methyl-1H-pyrrol-2-yl)acetyl methanesulphonamide, (4-isobutyl-2-methylphenyl)acetyl methanesulphonamide, {2-methyl-4-[(trifluoromethanesulphonyl)amino]phenyl}acetyl methanesulphonamide, and [1-methyl-5-(4-methylbenzoyl)-1H-pyrrol-2-yl]acetyl\_methanesulphonamide.
- 11. (Currently Amended) Process A process for the preparation of compounds of formula (Ia) according to claim 8, comprising the transformation of transforming a compound of formula (I), according to claim 1,

## wherein

A is benzene, naphthalene, pyridine, pyrimidine, pyrrole, imidazole, furane, thiophene, indole or 7-aza-indole;

labels 1 and 2 mark the relevant positions on the A ring;

the X atom is selected from N (nitrogen) and C (carbon);

R is a substituting group on the A ring selected from:

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- a group in the 3 (meta) position selected from a linear or branched C<sub>1</sub>-C<sub>5</sub> alkyl, C<sub>2</sub> C<sub>5</sub>alkenyl or C<sub>2</sub>-C<sub>5</sub>-alkynyl group, substituted or not-substituted phenyl, linear or branched

<u>C<sub>1</sub>-C<sub>5</sub> hydroxyalkyl, C<sub>2</sub>-C<sub>5</sub>-acyl, substituted or not-substituted benzoyl;</u>

alkynyl group, C<sub>3</sub>-C<sub>6</sub>-cycloalkyl, C<sub>1</sub>-C<sub>5</sub>-acyloxy, substituted or not-substituted

benzoyloxy, C<sub>1</sub>-C<sub>5</sub>-acylamino, substituted or not-substituted benzoylamino, C<sub>1</sub>-C<sub>5</sub>-

a group in the 4 (para) position selected from C<sub>1</sub>-C<sub>5</sub> alkyl, C<sub>2</sub>-C<sub>5</sub>-alkenyl or C<sub>2</sub>-C<sub>5</sub>-

sulfonyloxy, substituted or not-substituted benzenesulfonyloxy, C<sub>1</sub>-C<sub>5</sub>-

alkanesulfonylamino, substituted or not-substituted benzenesulfonylamino, C<sub>1</sub>-C<sub>5</sub>-

alkanesulfonylmethyl, substituted or not-substituted benzenesulfonylmethyl, 2-furyl; 3-

tetrahydrofuryl; 2 thiophenyl; 2-tetrahydrothiophenyl groups or a C<sub>1</sub>-C<sub>8</sub>-alkanoyl,

cycloalkanoyl or arylalkanoyl-C<sub>1</sub>-C<sub>5</sub>-alkylamino group;

Hy is a small hydrophobic group with a steric hindrance factor ν ranging between 0.5 and 0.9 Å

(where v is the Charton steric constant for substituents)

wherein-YR' is OH, in-to a reactive intermediate, such as an acyl-chloride or a benzotriazolyl

ester, and reacting the intermediate with a compound of formula NH<sub>2</sub>SO<sub>2</sub>Rd, wherein Rd is C<sub>1</sub>-

 $C_6$ -alkyl,  $C_1$ - $C_6$ -cycloalkyl, or  $C_1$ - $C_6$ -alkenyl, in the presence of a suitable base.

12. (Currently Amended) Pharmaceutical compositions comprising a compound according to

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claim 1–8 in admixture with a suitable carrier thereof.

13. (Cancelled)

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14. (Cancelled)

- 15. (Currently Amended) Use—The method according to claim 1 in the preparation of a medicament for the treatment of psoriasis, ulcerative colitis, melanoma, chronic obstructive pulmonary disease (COPD), bullous pemphigoid, rheumatoid arthritis, idiopathic fibrosis, glomerulonephritis and in the prevention and treatment of damages caused by reperfusion after ischemia and reperfusion.
- 16. (New) The process of claim 11 where in said reactive intermediate is an acyl chloride or a benzotriazolyl ester.
- 17. (New) The compound of claim 8, wherein Hy is selected from methyl, ethyl, chlorine, bromine, methoxy and trifluoromethyl.